

SECTION 7

AIRPORT PLANS

This section presents in detail the twenty-year Master Plan development program for Cochise College Airport. The proposed Master Plan improvements are presented in a set of five drawings. The improvements depicted in the drawings are based on the facility requirements discussed in Section 5 and the selected development concept (Concept A) presented in Section 6. This development program integrates the existing airport facilities with the development needed during the next twenty years.

The 20-year airport development plan, including airside and landside improvements, is depicted on Figure 7-1, Airport Layout Plan (ALP). The development of the central building area is shown in greater detail in Figure 7-2, Terminal Area Plan. Figure 7-3, Airspace and Approach Zones Plan, depicts the imaginary surfaces on and around the Airport, as outlined in FAR Part 77. Figure 7-4, Land Use Plan, shows the relationship of planned land uses around the airport to airport noise contours and the airport traffic pattern area. The Airport Property Map is shown on Figure 7-5.

AIRPORT LAYOUT PLAN (ALP)

The Airport Layout Plan (ALP), Figure 7-1, illustrates the overall development plan for Cochise College Airport as recommended in this Master Plan Study. The ALP provides for the phased implementation of the airport improvements without disrupting existing airport uses and activities.

Design Standards

The ALP conforms to the guidelines set forth by the Federal Aviation Administration (FAA) for the preparation of airport master plans, which are contained primarily in:

- FAA Advisory Circular 150/5070-6A, Airport Master Plans.
- FAA Advisory Circular 150/5300-13, Airport Design.

Planning and design standards used in the preparation of the ALP and the Terminal Area Plan are based on an Airport Reference Code of B-I, for small airplanes, as described in Section 5. The applicable airport planning and design standards are listed in Table 5-3.

Deviations from Design Standards

The existing airport facilities, with one exception, meet all FAA planning and design standards for the B-I category of aircraft. The existing deviation from the FAA design standards is:

- The parallel taxiway width does not meet the standard for the general category of aircraft applied to the airport, although it does meet the aircraft-specific standard for the Beech Baron, the largest aircraft currently operated by the College.

The proposed Master Plan improvements will eliminate this deviation, as described below. The proposed improvements will create no new deviations from design standards.

To continue to comply with RSA and ROFA standards associated with Runway 23, it is recommended that the rodeo training area service road at the end of Runway 23 continue to be used only on a controlled-basis, whereby the road is closed when Runway 5 is in use.

Although not a design standard, Federal Aviation Regulations Part 77, Objects Affecting Navigable Airspace, provides procedures for identifying potential obstructions to air navigation. The procedures involve locating objects with respect to a set of imaginary surfaces. Objects penetrating FAR Part 77 surfaces are described later in this section.

Proposed Development and Development Phasing

Property acquisition and runway, taxiway, airfield lighting and navigational aid improvements recommended in the Master Plan are listed in Table 7-1 by phase of development and described below.

Acquire Property Interest for Runway 23 Runway Protection Zone. Controlling interest in the Runway Protection Zone (RPZ) for Runway 23 will be obtained through fee title acquisition or the acquisition of an avigation easement. An effort will be made to secure the property interest through a donation to the College.

Acquire Property Interest for Runway 5 Runway Protection Zone. Controlling interest in the Runway Protection Zone (RPZ) for Runway 5 will be obtained through fee title acquisition or the acquisition of an avigation easement. An effort will be made to secure the property interest through a donation to the College.

Table 7-1
PROPOSED MASTER PLAN IMPROVEMENTS
COCHISE COLLEGE AIRPORT

Type of Improvement	Phase of Improvement		
	Phase 1 2001-2005	Phase 2 2006-2010	Phase 3 2011-2020
Acquisition of Property Interest			
Acquisition of interest in Runway 23 RPZ property	X		
Acquisition of interest in Runway 5 RPZ property	X		
Airfield Improvements			
Install Runway End Identifier Lights (REILs)	X		
Widen the parallel taxiway from 20 feet to 25 feet		X	
Upgrade the runway lights to Medium Intensity Runway Lights (MIRL)		X	
Upgrade the taxiway lights to Medium Intensity Taxiway Lights (MITL)		X	
Install a Global Positioning System (GPS) instrument approach procedure		X	
Install an Automated Weather Observing System		X	
Install a pilot-control system for airfield lighting, and a ground communications outlet		X	
Terminal Area Improvements			
Construct 10 new aircraft shade units	Construct 5 units	Construct 5 units	
Construct new aircraft maintenance hangar		X	
Reconfigure tiedowns and expand the tiedown apron by approximately 3,150 square yards to provide a total of 32 tiedown spaces	Reconfigure tiedowns to accommodate 26 aircraft	Nest tiedowns to accommodate 29 aircraft	Expand apron to accommodate 32 aircraft

Install Runway End Identifier Lights. Runway end identifier lights (REILs) will be installed at each end of the runway. These lights will provide rapid and positive identification of the approach end of the runway.

Widen the Parallel Taxiway. The parallel taxiway will be widened from 20 to 25 feet to meet FAA design standards for the general ARC B-I category. This will provide the standard width to serve all ARC B-I aircraft, including those larger than the Beech Baron.

Upgrade the Runway Lights to Medium Intensity Runway Lights. The runway lighting system will be upgraded from low intensity to medium intensity runway lights (MIRL) to provide better nighttime visibility of the airfield to pilots approaching the airport.

Upgrade the Taxiway Lights to Medium Intensity Taxiway Lights. The taxiway lighting system will be upgraded from low intensity to medium intensity taxiway lights (MITL) to provide better nighttime visibility for taxiing aircraft.

Install a Global Positioning System (GPS) Instrument Approach System. A GPS circling instrument approach procedure will be provided. It is assumed the visibility minimum for this approach procedure will not be less than one mile. A GPS approach procedure is recommended in the Navigational Aids and Aviation Services Special Study prepared by ADOT.

Install an Automated Weather Observing System. An Automated Weather Observing System (AWOS-2) will be installed to provide weather data to pilots and support the future instrument approach capability at the airport. An AWOS-3 was recommended in the Navigational Aids and Aviation Services Special Study.

Install a Pilot-Control System for Airfield Lighting, and a Ground Communications Outlet. These navigational support systems will enhance the safety and efficiency of aircraft operations.

TERMINAL AREA PLAN

Recommended Master Plan improvements in the building area are illustrated in the Terminal Area Plan (Figure 7-2). Building area improvements are listed by phase in Table 7-1 and described below.

Construct a New Shade Building to Accommodate Ten Aircraft. The new shade building will be constructed immediately west of the existing shade structure. It will be built in two phases to accommodate the needs of the College.

Construct an Aircraft Maintenance Hangar. The hangar will be used for maintenance of the College's flight training aircraft fleet.

Expand the Aircraft Parking Apron to Accommodate Eight Additional Tiedowns. Approximately 3,150 square yards of apron will be constructed in phases to provide a total of 32 tiedown spaces. The new apron area will be added to the west side of the existing apron. The existing apron will be reconfigured by adding new tiedown spaces on the south end to minimize new apron construction. The taxilane along the south side of the apron will be eliminated by the addition of these new tiedown positions.

In Phase 1 (2001 to 2005), the additional tiedown needs will be accommodated by the reconfiguration of the existing ramp as described above. In Phase 2 (2006 to 2010), the tiedown requirement will be met by nesting spaces in the easterly rows. Additional aircraft parking apron will be constructed in Phase 3.

Expand the Technology Center Building and Adjacent Parking Area if Necessary. As the aviation program expands, additional space will be needed for classrooms for flight training and avionics, simulator facilities, dispatch area and vehicle parking. In the future, if other programs occupying the Technology Center have a reduced need for space in the building, aviation program activities, particularly classroom and simulator uses and parking, can be expanded into those areas. No expansion of the Technology Center is proposed, since the future needs for other uses of the building are not identified at this time.

In addition to these improvements, the following separations will be established, following the ARC B-I standards in Table 5-3:

- A separation of 69 feet between the parallel taxiway centerline and the apron taxilane centerline.
- A separation of 39.5 feet from the apron taxilane centerline and parked aircraft.

The building restriction line (BRL) will continue to be located 250 feet from the runway centerline.

AIRSPACE AND APPROACH ZONES PLAN

The Airspace and Approach Zones Plan, presented as Figure 7-3, depicts the imaginary surfaces on and around Cochise College Airport as specified in Part 77 of the Federal Aviation Regulations (FAR), Objects Affecting Navigable Airspace. The purpose of the FAR Part 77 surfaces is to identify objects that could possibly, by their height, affect air navigation at an airport. Any penetration of the terrain or a man-made object above these surfaces is reviewed by the FAA to determine if it would affect safety of flight or influence an instrument approach procedure. The FAA could require a penetrating object to be appropriately marked and/or lighted.

FAR Part 77 Surfaces for Cochise College Airport

The FAR Part 77 surfaces and their dimensions that apply to Cochise College Airport under the 20-year Master Plan are as follows (refer to Table 5-3):

- The Primary Surface is defined as being longitudinally centered along the runway, extending 200 feet beyond each end of the runway. The width of the existing Primary Surface is 250 feet. The existing Primary Surface will accommodate the planned circling instrument approach procedure. The elevation of the Primary Surface is the same as the elevation of the runway centerline at the nearest point.
- Approach Surfaces extend outward and upward from the ends of the Primary Surfaces according to runway type, length, and availability of instrument approaches. The inner width of the Approach Surfaces is the same width as the Primary Surface. The existing Approach Surfaces extend a horizontal distance of 5,000 feet at a slope of 20:1 and expand uniformly to an outer width of 1,250 feet. These Approach Surfaces will accommodate the planned circling instrument approach procedure.
- The Transitional Surfaces extend outward and upward at right angles from the edges of the Primary and Approach Surfaces to the runway centerline (and the runway centerline extended) at a slope of 7:1.
- The Horizontal Surface is a horizontal plane 150 feet above the airport elevation. For Cochise College Airport, the Horizontal Surface is approximately 4,293.0 feet above mean sea level (MSL). The airport elevation, defined as the highest point on the runway, is and will remain approximately 4,143.0 feet MSL. The perimeter of the Horizontal Surface is delineated by an arcs of radii 5,000 feet from points on the extended centerline of the runway 200 feet from the runway ends. Adjacent arcs are connected by tangent lines.
- The Conical Surface extends outward and upward from the edge of the Horizontal Surface at a slope of 20:1 for a horizontal distance of 4,000 feet. Thus, the elevation of the Conical Surface at its outermost edge is approximately 4,493.0 feet MSL.

Penetrations to FAR Part 77 Surfaces

Penetrations to the proposed FAR Part 77 surfaces, excluding necessary airfield lighting and navigational aids, are (refer to Figure 7-3):

- Primary Surface – The following are penetrations to the proposed Primary Surface:
 - (a) A fence east of Runway 23 – The 4-foot fence penetrates the Primary Surface by approximately 3 feet.

- (b) The service road east of Runway 23 – The 10-foot clearance above the service road penetrates the Primary Surface by approximately 9 feet.

These penetrations are not expected to affect safety of flight or the future GPS instrument approach procedure. The service road will remain a controlled-access road, used only when Runway 5 is not in operation.

- Approach Surfaces – The following are penetrations to the proposed Approach Surfaces:
 - (a) A fence at the end of Runway 5 – The 4-foot fence penetrates the Approach Surface by approximately 2 feet.
 - (b) The public road west of Runway 5 – The Approach Surface at its nearest point to the public road west of Runway 5 is approximately 5 feet above the roadway. The clearance height for public roadways is 15 feet above the road surface. Thus the roadway clearance penetrates the Approach Surface by approximately 10 feet.
 - (c) A sign along the public road west of Runway 5 – The sign penetrates the Approach Surface by approximately 2 feet.
 - (d) A fence east of Runway 23 – The 4-foot fence penetrates the Approach Surface by approximately 3 feet.
 - (e) The service road east of Runway 23 – The 10-foot clearance above the service road penetrates the Approach Surface by approximately 9 feet.

The locations of the Runway 5 and 23 thresholds conform to FAA threshold siting standards as contained in FAA Advisory Circular 150/5300-13, Airport Design. Note that the Runway 5 Threshold Surface, which applies to threshold siting, is measured from the Runway 5 threshold, while the Runway 5 Approach Surface begins 200 feet from the runway end (refer to Table 5-3). Note also that the Runway 23 Threshold Surface begins 200 feet from the displaced threshold, while the Runway 23 Approach Surface begins 200 feet from the runway end. Thus, the penetrations to the Approach Surfaces are not expected to affect the safety of flight, including the proposed GPS approach procedure.

- Transitional Surfaces – The following are penetrations to the proposed Transitional Surfaces:
 - (a) A fence at the end of Runway 5 – The 4-foot fence penetrates the Transitional Surface by approximately 2 feet.
 - (b) The public road west of Runway 5 – The Transitional Surface at its nearest point to the public road west of Runway 5 is approximately five feet above the roadway. The clearance height for public roadways is 15 feet above the road surface. Thus the roadway clearance penetrates the Transitional Surface by approximately 10 feet.

- (c) A utility pole along the public road west of Runway 5 – The utility pole, located south of the Approach Surface, penetrates the Transitional Surface by approximately 9 feet.
- (d) A fence east of Runway 23 – The 4-foot fence penetrates the Transitional Surface by approximately 3 feet.
- (e) The service road east of Runway 23 – The 10-foot clearance above the service road penetrates the Transitional Surface by approximately 9 feet.

These penetrations are not expected to affect safety of flight or the future GPS instrument approach procedure. The service road will remain a controlled-access road, used only when Runway 5 is not in operation.

- Horizontal Surface – None.
- Conical Surface – None.

In order to protect the airport from the future construction of objects around the airport that could affect the safe and efficient operation of aircraft, it is recommended that the County of Cochise incorporate the height restrictions of this Airspace and Approach Zones Plan into its zoning ordinance.

INNER PORTION OF APPROACH SURFACE

Figure 7-4 shows the inner portion of the Approach Surface in greater detail. Plan views and profiles of both runway ends are provided.

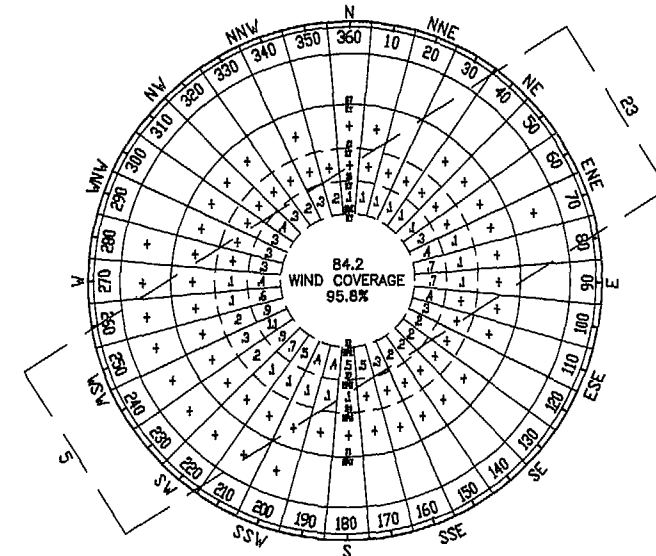
LAND USE PLAN

The Land Use Plan, (refer to Figure 7-5) indicates the owner ships of the property surrounding the College Campus. The land is located in unincorporated Cochise County and is zoned RU-4 by the County. Permitted uses in this zoning district include residences, mobile home and manufactured home parks, utility installations, churches, animal hospitals, riding stables, grocery stores and agriculture-related retail sales, among other uses. Minimum site area in the RU-4 zoning district is 4.0 acres. Maximum density is one dwelling unit per acre. Maximum height is 30 feet above grade. Airports and flying fields, including private landing areas, are permitted as a Special Use in the RU zoning district, subject to procedures and review criteria as set forth in Section 1716 of the Zoning Regulations. However, according to County officials, until 1975 there was no zoning regulation in the county. The college and airport were established over 30 years ago, thus Cochise College and the Cochise College Airport have no Special Use permits of any type on file with Cochise County.

The Plan also indicates that the entire Cochise College campus is devoted to education purposes (community college level).

AIRPORT DATA			
		EXISTING	ULTIMATE
AIRPORT ELEVATION		4143.0' MSL	SAME
AIRPORT REFERENCE POINT		31°22'01.8"N	SAME
(ARP) COORDINATES (NAD 83)		109°41'51.88"W	SAME
MEAN MAX. TEMP. OF HOTTEST MONTH		94° (AUG)	SAME
AIRPORT AND TERMINAL NAV AIDS		NONE	SAME
AIRPORT REFERENCE CODE		B-1	SAME
AIRPORT WIND COVERAGE (10.5 KNOTS)		95.8%	SAME
MISCELLANEOUS FACILITIES		ROTATING BEACON, SEGMENTED CIRCLE, TETRAHEDRON, WINDSOCK	ROTATING BEACON, SEGMENTED CIRCLE, TETRAHEDRON, WINDSOCK, AWOS-3
DESIGN AIRCRAFT		BEECH BARON	SAME
GPS APPROACH		NONE	RWY 23

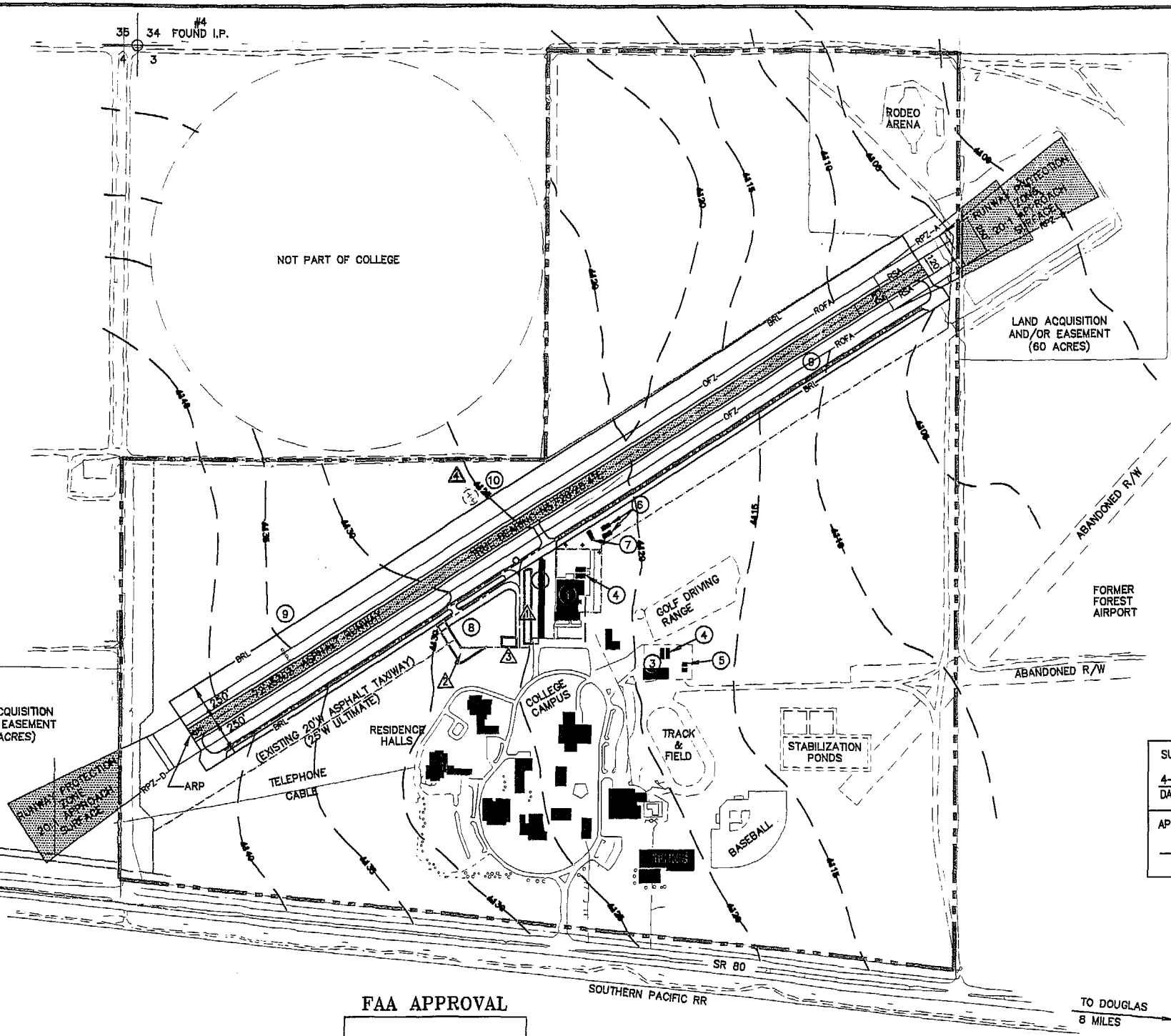
LEGEND		
	EXISTING	ULTIMATE
AIRFIELD PAVEMENT	ASPHALT	SAME
AIRPORT BOUNDARY	BOUNDARY	SAME
AIRPORT REFERENCE POINT (ARP)	POINT	SAME
BUILDINGS	BUILDINGS	SAME
BUILDING RESTRICTION LINE (BRL)	4125	SAME
GROUND CONTOURS	4125	SAME
FENCE	FENCE	SAME
OBSTACLE FREE ZONE	OFZ	SAME
ROAD/VEHICLE PARKING	ROAD/VEHICLE PARKING	SAME
RUNWAY OBJECT FREE AREA	ROFA	SAME
RUNWAY SAFETY AREA	RSA	SAME
SECTION CORNER	SECTION CORNER	SAME
RUNWAY PROTECTION ZONE-DEPARTURE	RPZ-D	SAME
RUNWAY PROTECTION ZONE-ARRIVAL	RPZ-A	SAME
RUNWAY PROTECTION ZONE	RPZ	SAME



SOURCE: Biebee-Douglas International Airport Records
For 1986-1996 National Climatic Data Center-Asheville, NC

RUNWAY END DATA					
		RUNWAY END COORDINATES		RUNWAY END ELEVATION	
RUNWAY		EXISTING	ULTIMATE	EXISTING	ULTIMATE
5	LATITUDE	31°22'01.8"N	SAME	4143.0	SAME
	LONGITUDE	109°41'51.8"W	SAME		
23	LATITUDE	31°22'31.4"N	SAME	4106.6	SAME
END	LONGITUDE	109°40'56.8"W	SAME		
23	LATITUDE	31°22'28.1"N	SAME	4109.6	SAME
THRESHOLD	LONGITUDE	109°41'02.8"W	SAME		

RUNWAY DATA		
RUNWAY 5/23		
	EXISTING	ULTIMATE
EFFECTIVE GRADIENT	0.68%	SAME
PAVEMENT STRENGTH (000 LBS)	12.5 (SINGLE WHEEL)	SAME
RUNWAY & TAXIWAY SURFACES	ASPHALTIC CONCRETE	SAME
RUNWAY LIGHTING	LIRL	SAME
RUNWAY MARKING	VISUAL	SAME
NAVIGATIONAL AIDS	NONE	NONE
WIND COVERAGE (10.5 KTS/12 MPH)	95.8%	SAME
VISUAL AIDS	PAPI (RWY 5 & RWY 23)	PAPI (RWY 5 & RWY 23) REIL (RWY 5 & RWY 23)
APPROACH CATEGORY (FAR PART 77)	VISUAL (RWY 5 & RWY 23)	SAME
APPROACH SURFACES	20:1 (RWY 5 & RWY 23)	SAME
MAXIMUM ELEVATION ABOVE MSL	4143.0'	SAME
RUNWAY LENGTH	5303'	SAME
RUNWAY WIDTH	72'	SAME
RUNWAY SAFETY AREA LENGTH	240' (L)/120' (W)	SAME
BEYOND RUNWAY END/WIDTH		
INSTRUMENT RUNWAY	NONE	RWY 23-GPS



ABBREVIATIONS	
ATCT	Airport Traffic Control Tower
AWOS	Automated Weather Observation System
BRL	Building Restriction Line
GPS	Global Positioning System
MIRL	Medium Intensity Runway Edge Lights
OFZ	Obstacle Free Zone
PAPI	Precision Approach Path Indicator
REIL	Runway End Identifier Lights
ROFA	Runway Object Free Area
RSA	Runway Safety Area
TOFA	Taxiway Object Free Area
MSL	Mean Sea Level
LBS	Pounds
KTS	Knots
MPH	Miles Per Hour
FAR	Federal Aviation Regulations
RWY	Runway
L	Length
W	Width
LIRL	Low Intensity Runway Lights
NAD	North American Datum
RPZ	Runway Protection Zone
RPZ-A	Runway Protection Zone- Approach
RPZ-D	Runway Protection Zone- Departure

AIRPORT FACILITIES	
EXISTING	FUTURE
(1) Technical Center	
(2) Aircraft Shelter	△ Aircraft Shelter
(3) Campus/Airport Maint	△ Aircraft Maint Hangar
(4) Quonsets	
(5) Fuel Storage	
(6) Tenant Quonset	
(7) Tenant Office	
(8) Aircraft Parking Apron	△ Aircraft Pkng Apron
(9) PAPI	
(10) Lighted Segmented Circle, Tetrahedron & Windsock	△ AWOS-3

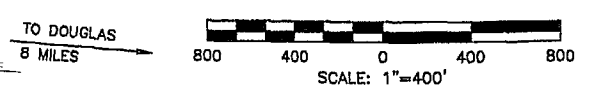
NOTES:
1. All elevations are in feet above mean sea level (MSL).
2. Latitude/longitude coordinates are NAD 83.

SUBMITTED BY: DMJM ARIZONA, INC.
4-20-01 JOHN W. GEROMETTA
DATE

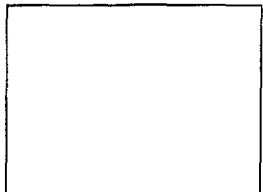
APPROVED BY: COCHISE COLLEGE
ALAN C. DAVIS 4-20-01
DATE

11°0.6'
Magnetic

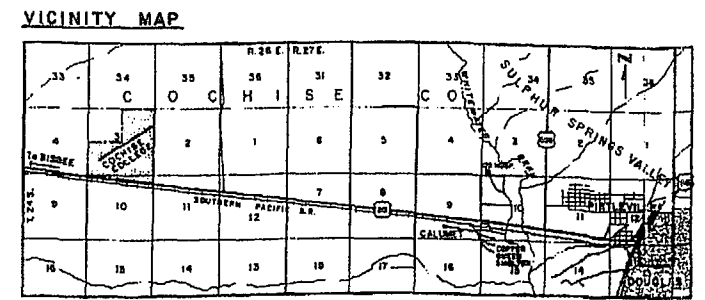
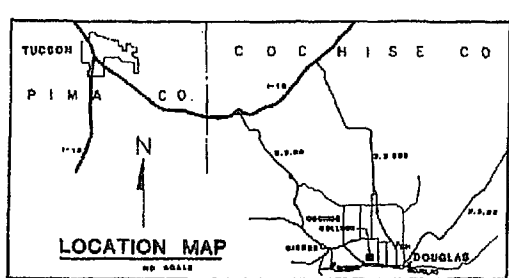
MAGNETIC DECLINATION= 11 DEGREES 0.6 MINUTES EAST
ANNUAL RATE OF CHANGE= -2.0 MINUTES/YEAR



FAA APPROVAL



The contents of this plan do not necessarily reflect the official views of policy of the FAA. Acceptance of this document by the FAA does not in any way constitute a commitment on the part of the United States to participate in any development depicted therein nor does it indicate that the proposed development is environmentally acceptable in accordance with appropriate public laws.



AIRPORT LAYOUT PLAN

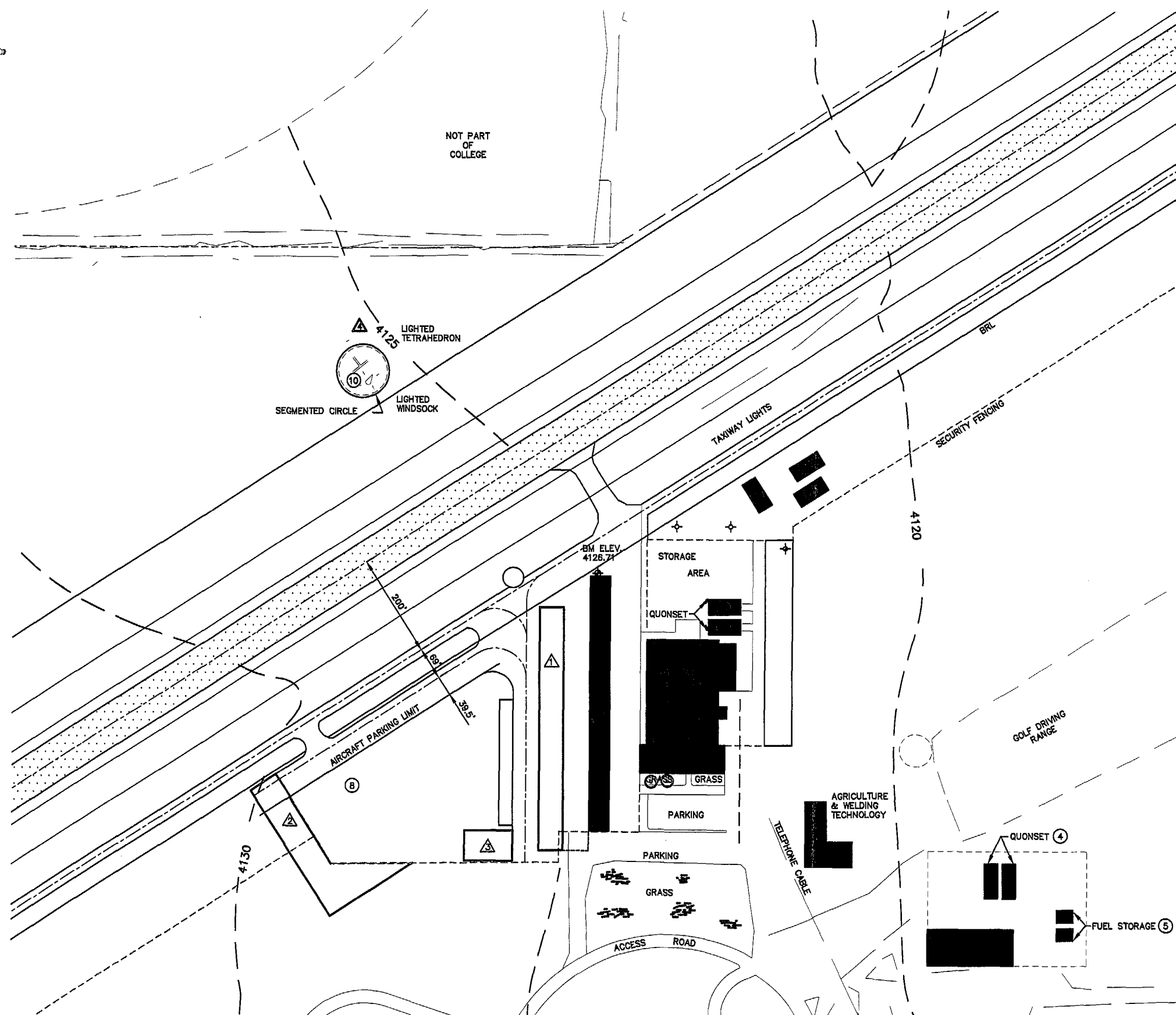
COCHISE COLLEGE AIRPORT
DOUGLAS, ARIZONA.

DMJM ARIZONA INC. 2777 E. CAMELBACK ROAD
SUITE 200 PHOENIX, ARIZONA 85016
(602)337-2777











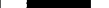


DESIGNED: JWG CHECKED: SA
DRAWN: MAR DATE: 12/00

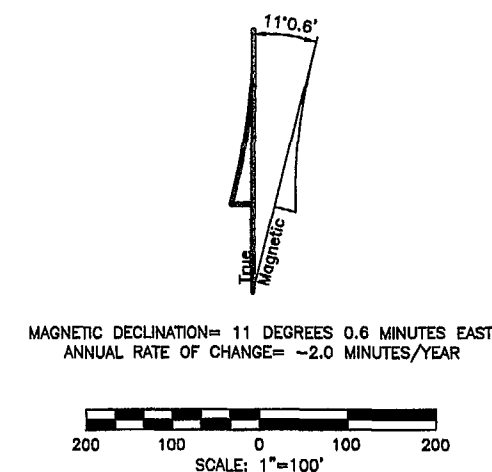
SHEET 1 OF 6

FIGURE 7-1



AIRPORT FACILITIES	
EXISTING	FUTURE
① TECHNICAL CENTER	△ AIRCRAFT SHELTER
② AIRCRAFT SHELTER	△ AIRCRAFT PARKING APRON
③ CAMPUS/AIRPORT MAINTENANCE	△ AIRCRAFT MAINTENANCE HANGAR
④ QUONSETS	
⑤ FUEL STORAGE	
⑥ TENANT QUONSET	
⑦ TENANT OFFICE	
⑧ AIRCRAFT PARKING APRON	
⑨ PAPI	
⑩ LIGHTED SEGMENTED CIRCLE, TETRAHEDRON & WIND SOCK	△ AWOS-3

LEGEND		
	EXISTING	ULTIMATE
AIRFIELD PAVEMENT		
AIRPORT BOUNDARY		SAME
AIRPORT REFERENCE POINT (ARP)		SAME
BUILDINGS		
BUILDING RESTRICTION LINE (BRL)		
GROUND CONTOURS	4125	SAME
FENCE		
OBSTACLE FREE ZONE	OPZ	SAME
ROAD/VEHICLE PARKING		
RUNWAY OBJECT FREE AREA	ROFA	SAME
RUNWAY SAFETY AREA	RSA	SAME
SECTION CORNER		SAME
RUNWAY PROTECTION ZONE-DEPARTURE	RPZ-D	SAME
RUNWAY PROTECTION ZONE-ARRIVAL	RPZ-A	SAME
RUNWAY PROTECTION ZONE	RPZ	SAME



NO.	DATE		REVISION		BY
<p align="center">TERMINAL AREA PLAN</p>					
<p align="center">COCHISE COLLEGE AIRPORT DOUGLAS, ARIZONA</p>					
<p>DMJM</p>		<p>2777 E. CAMELBACK ROAD SUITE 200 PHOENIX, ARIZONA 85016 (602)337-2777</p>			
DESIGNED: JWG		CHECKED: SA		SHEET 2 OF 6	
DRAWN: MAR		DATE: 12/00			

OBSTRUCTION IDENTIFICATION TABLE					
OBS. No.	DESCRIPTION	ELEV.	PENETR.	SURFACE	PROPOSED ACTION
①	FENCE	4150	2	APPROACH	TO REMAIN
②	PUBLIC ROAD +15 FEET	4160	10	APPROACH	TO REMAIN
③	SIGN	4154	2	APPROACH	TO REMAIN
④	UTILITY POLE	4184	9	TRANSITIONAL	TO REMAIN
⑤	FENCE	4109	3	PRIMARY AND TRANSITIONAL	TO REMAIN
⑥	SERVICE ROAD +10 FEET	4115	9	PRIMARY AND TRANSITIONAL	TO REMAIN
⑦	FENCE	4109	3	PRIMARY AND APPROACH	TO REMAIN
⑧	SERVICE ROAD +10 FEET	4115	9	PRIMARY AND APPROACH	TO REMAIN

SURFACE ELEVATIONS	
SURFACE	ELEV.
END OF RUNWAY 5	4,143.0
END OF RUNWAY 23	4,106.6
HORIZONTAL SURFACE	4,293.0
CONICAL SURFACE-UPPER LIMIT	4,493.0
RWY 5 APPROACH SURFACE-UPPER LIMIT	4,393.0
RWY 23 APPROACH SURFACE-UPPER LIMIT	4,356.6

USGS MAPS USED FOR BASE	
7.5 MIN. QUAD. SHEETS	
PAUL SPUR	
DOUGLAS	
XXX	
XXX	
XXX	
XXX	

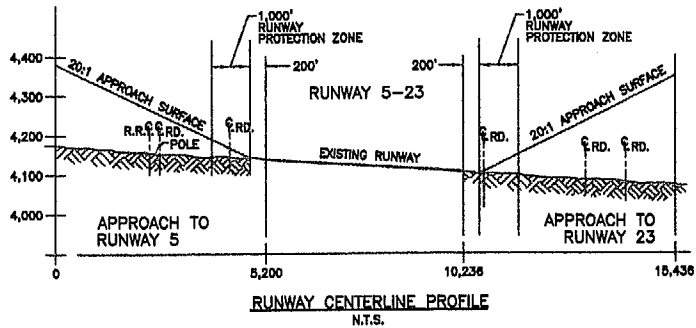
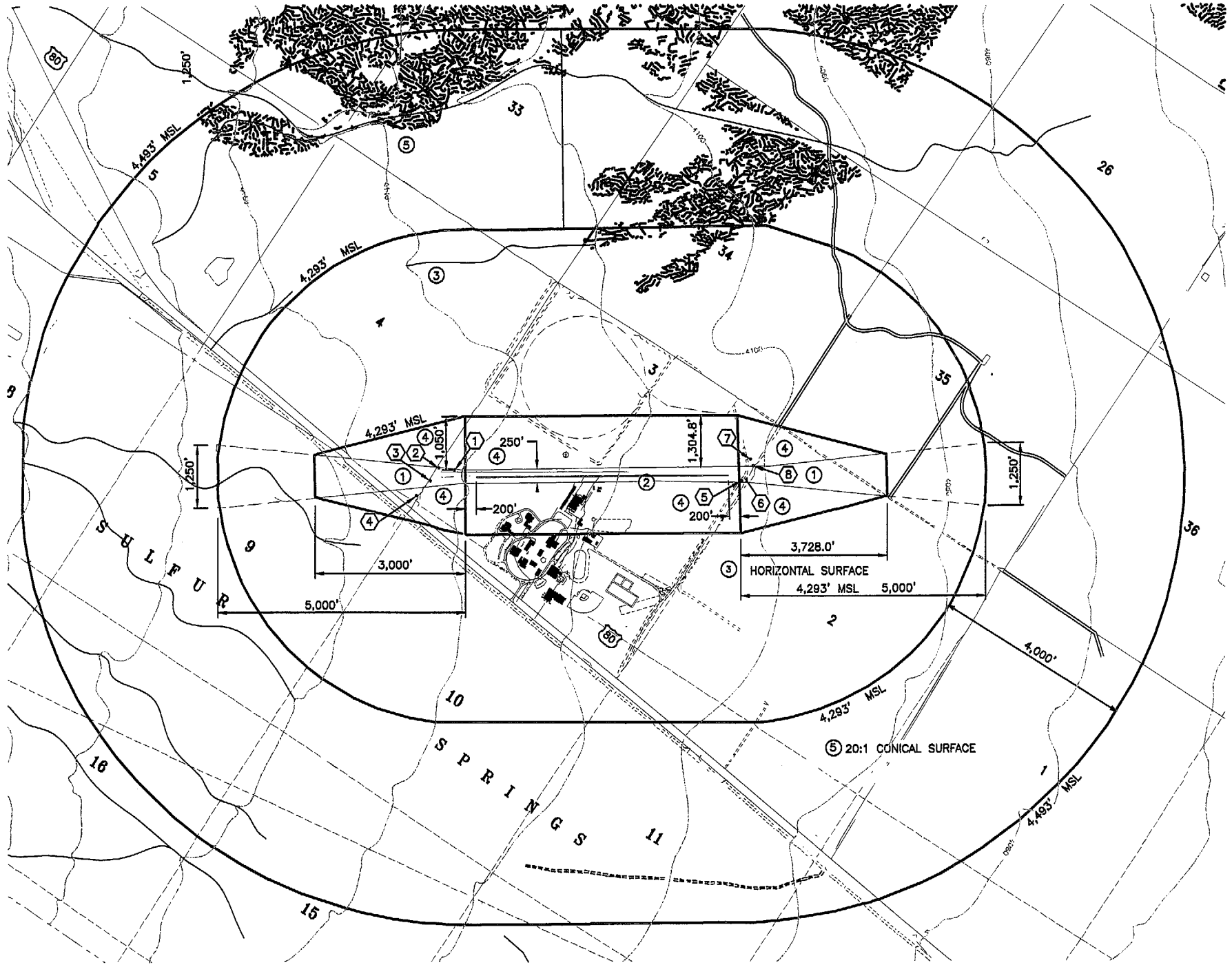


FIGURE 7-4 FOR CLOSE IN OBSTRUCTIONS



- NOTES:
1. ALL ELEVATIONS ARE IN FEET ABOVE MEAN SEA LEVEL (MSL).
 2. APPROACH SURFACES OF RUNWAYS 5 AND 23 EXTEND ABOVE THE HORIZONTAL SURFACE.
 3. APPROACH SURFACES OF RUNWAYS 5 AND 23 ARE 5,000 FEET LONG, AND HAVE AN INNER WIDTH OF 250 FEET AND OUTER WIDTH OF 1,250 FEET.
 4. REFER TO THE INNER PORTION OF THE APPROACH SURFACE PLAN.

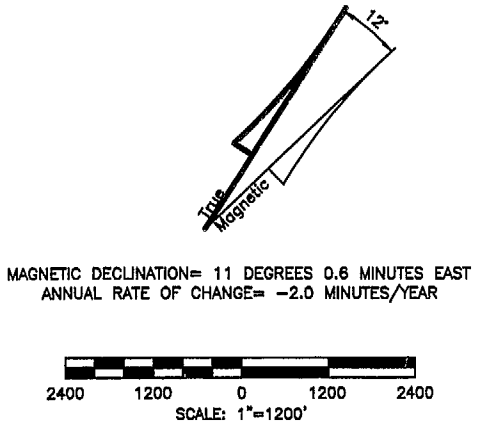
FAR PART 77 ITEM		DIMENSION
ITEM DESCRIPTION		DATA
APPROACH & PRIMARY SURFACE WIDTH AT INNER END		250'
APPROACH SURFACE LENGTH		5,000'
WIDTH OF APPROACH SURFACE AT END		1,250'
APPROACH SLOPE		20:1
HORIZONTAL SURFACE RADIUS		5,000'
CONICAL SURFACE WIDTH		4,000'

LEGEND	
ITEM	
①	APPROACH SURFACE
②	PRIMARY SURFACE
③	HORIZONTAL SURFACE
④	TRANSITIONAL SURFACE-7:1
⑤	CONICAL SURFACE-20:1

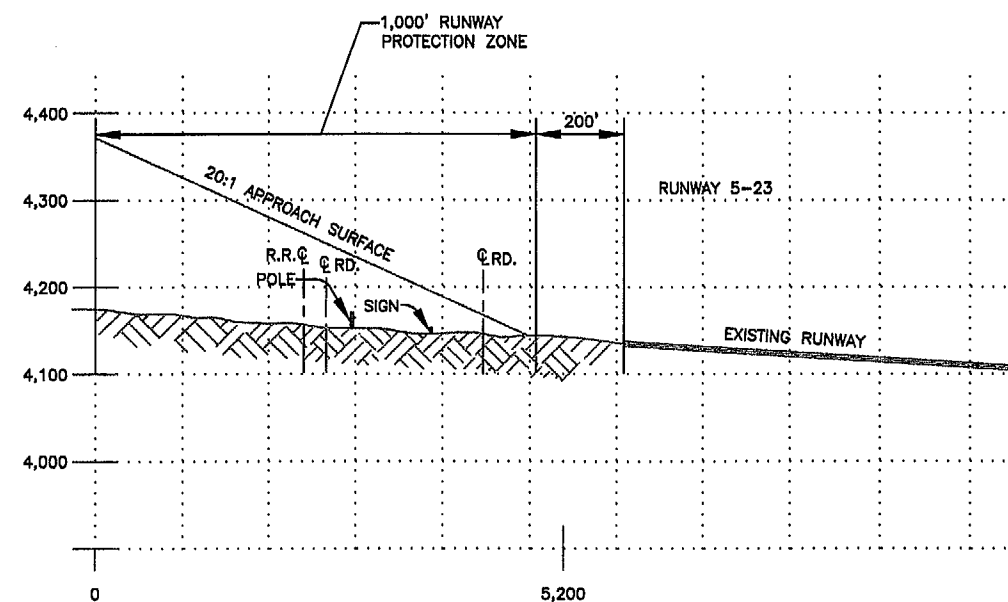
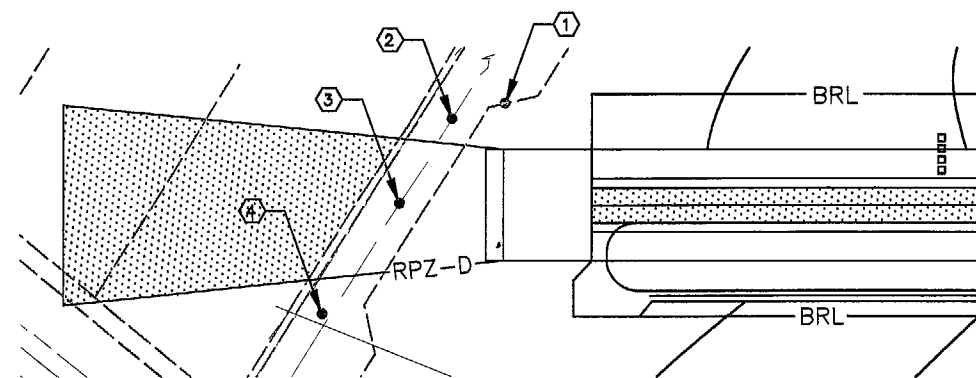
NOTE: IMAGINARY SURFACE CONTOURS ARE BASED ON FEDERAL AVIATION REGULATIONS PART 77.

CONTOUR INTERVAL IS 20 FEET. DATUM IS MEAN SEA LEVEL.

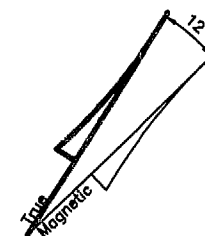
VEGETATION AREA



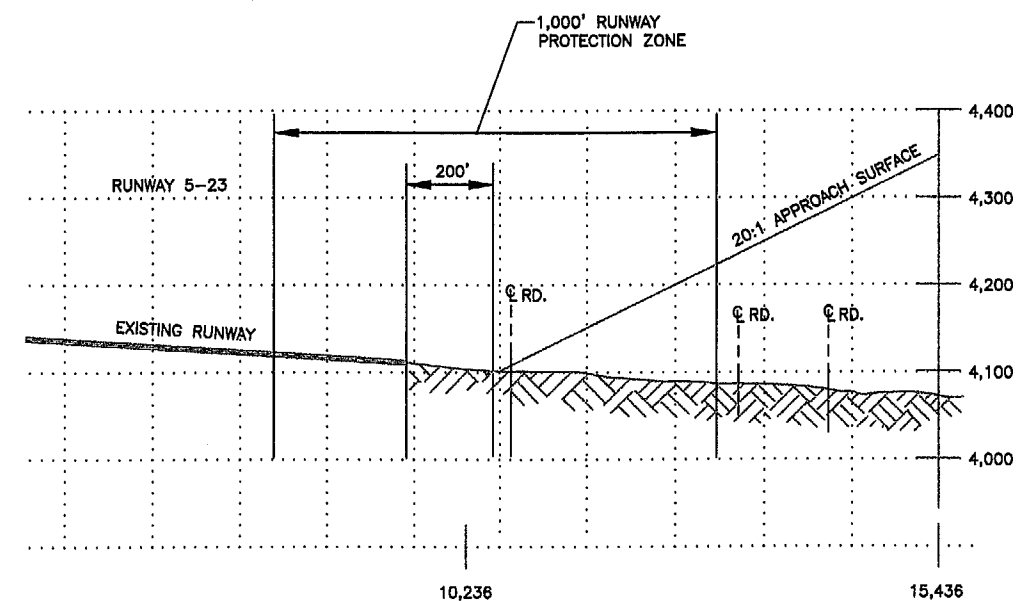
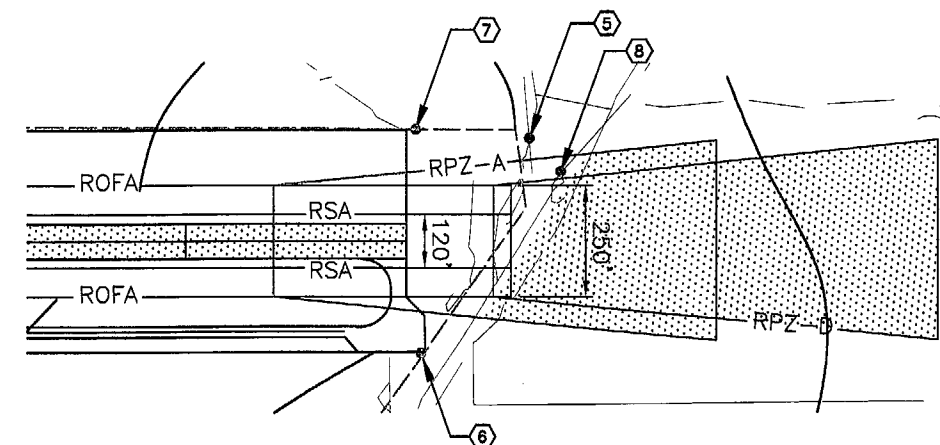
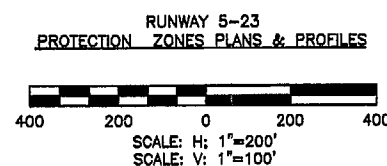
NO.	DATE	REVISION	BY	APP.
AIRSPACE & APPROACH ZONES PLAN				
COCHISE COLLEGE AIRPORT DOUGLAS, ARIZONA				
DMJM ARIZONA INC.		2777 E. CAMELBACK ROAD SUITE 200 PHOENIX, ARIZONA 85016 (602)337-2777		
DESIGNED:	CHECKED:	SHEET 3 OF 6		
DRAWN:	DATE:			



APPROACH TO RUNWAY 5



MAGNETIC DECLINATION= 11 DEGREES 0.6 MINUTES EAST
ANNUAL RATE OF CHANGE= -2.0 MINUTES/YEAR

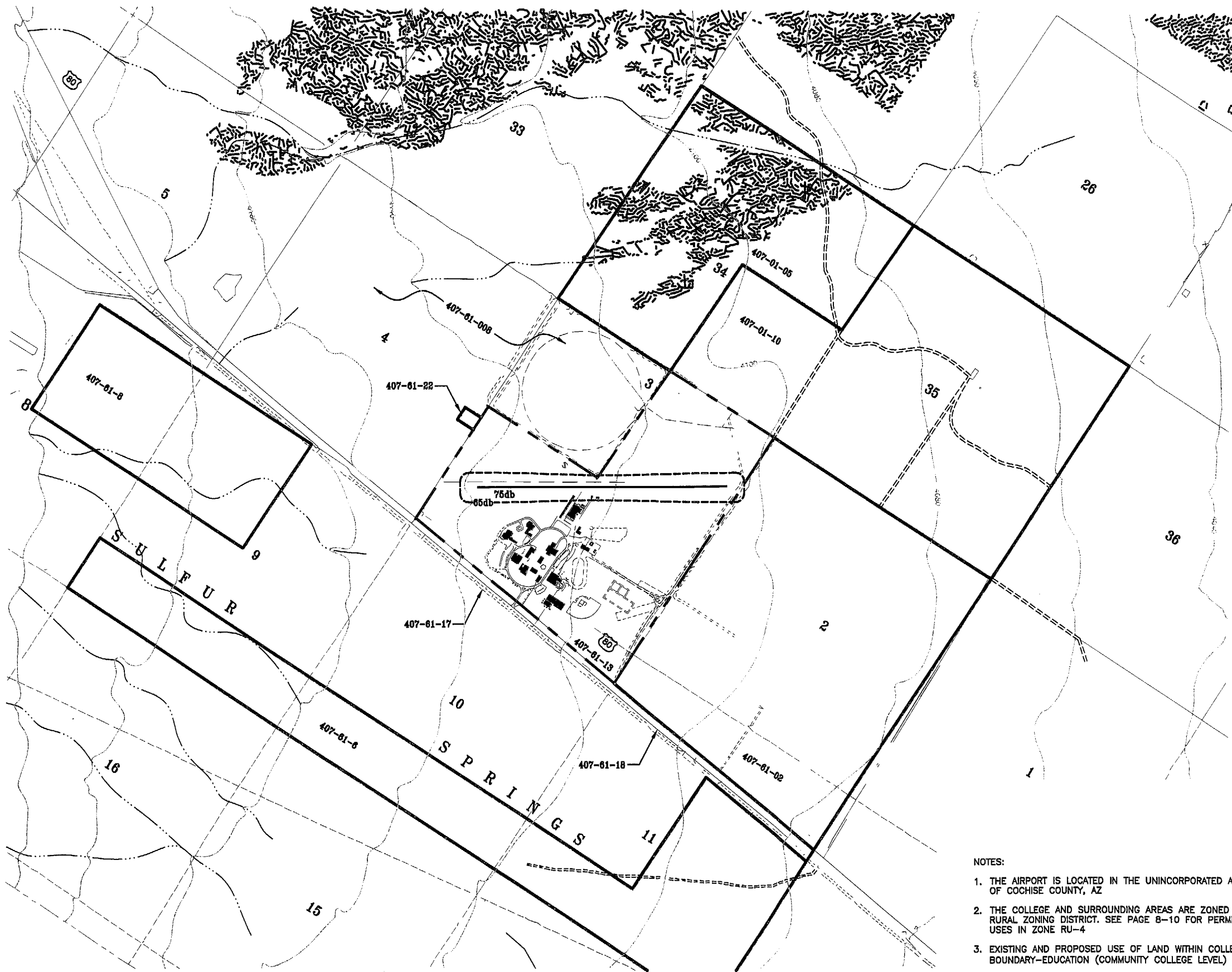


APPROACH TO RUNWAY 23

OBSTRUCTION IDENTIFICATION TABLE

OBS. No.	DESCRIPTION	ELEV.	PENETR.	SURFACE	PROPOSED ACTION
①	FENCE	4150	2	APPROACH	TO REMAIN
②	PUBLIC ROAD +15 FEET	4180	10	APPROACH	TO REMAIN
③	SIGN	4154	2	APPROACH	TO REMAIN
④	UTILITY POLE	4184	9	TRANSITIONAL	TO REMAIN
⑤	FENCE	4109	3	PRIMARY AND TRANSITIONAL	TO REMAIN
⑥	SERVICE ROAD +10 FEET	4115	9	PRIMARY AND TRANSITIONAL	TO REMAIN
⑦	FENCE	4109	3	PRIMARY AND APPROACH	TO REMAIN
⑧	SERVICE ROAD +10 FEET	4115	9	PRIMARY AND APPROACH	TO REMAIN

NO.	DATE	REVISION	BY	APP.
INNER PORTION OF THE APPROACH SURFACES				
COCHISE COLLEGE AIRPORT DOUGLAS, ARIZONA				
DMJM		2777 E. CAMELBACK ROAD SUITE 200 PHOENIX, ARIZONA 85016 (602)337-2777		
DESIGNED:	CHECKED:			
DRAWN:	DATE:			



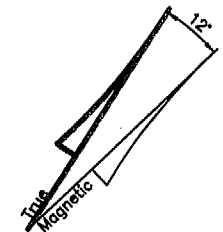
ADJOINING PROPERTY OWNERSHIPS

The College is located in portions of Sections 3 and 10, Township 24 South Range 28 East Gila and Salt River Baseline.

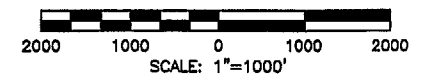
TAX PARCEL No.	OWNERSHIP
407-01-005	G P Schoenfelder, 3064 N 68th St, Scottsdale, AZ 85251
407-01-010	G P Schoenfelder, 3064 N 68th St, Scottsdale, AZ 85251
407-01-002	G P Schoenfelder, 3064 N 68th St, Scottsdale, AZ 85251
407-01-006	Jamess M & Lucille J Wilbourn, co-trustees 3865 W Highway 90, Douglas, AZ 85607
407-01-008	G P Schoenfelder, 3064 N 68th St, Scottsdale, AZ 85251
407-01-017	SWKR Operation Co, Inc. PO Box 1420 Benson, AZ 85602
407-01-018	SWKR Operation Co, Inc. PO Box 1420 Benson, AZ 85602
407-01-022	Arizona Public Service Co.
407-01-023	Richard L and Ursula Christiansen, 5208 N Brooka Rd, Douglas, AZ
None	State of Arizona

LEGEND

[---]	65dB (OUTER ZONE)
[---]	75dB (INNER ZONE)
[---]	RUNWAY AREA (INTERIOR)
[---]	AIRPORT PROPERTY LINE



MAGNETIC DECLINATION= 11 DEGREES 0.6 MINUTES EAST
ANNUAL RATE OF CHANGE= -2.0 MINUTES/YEAR

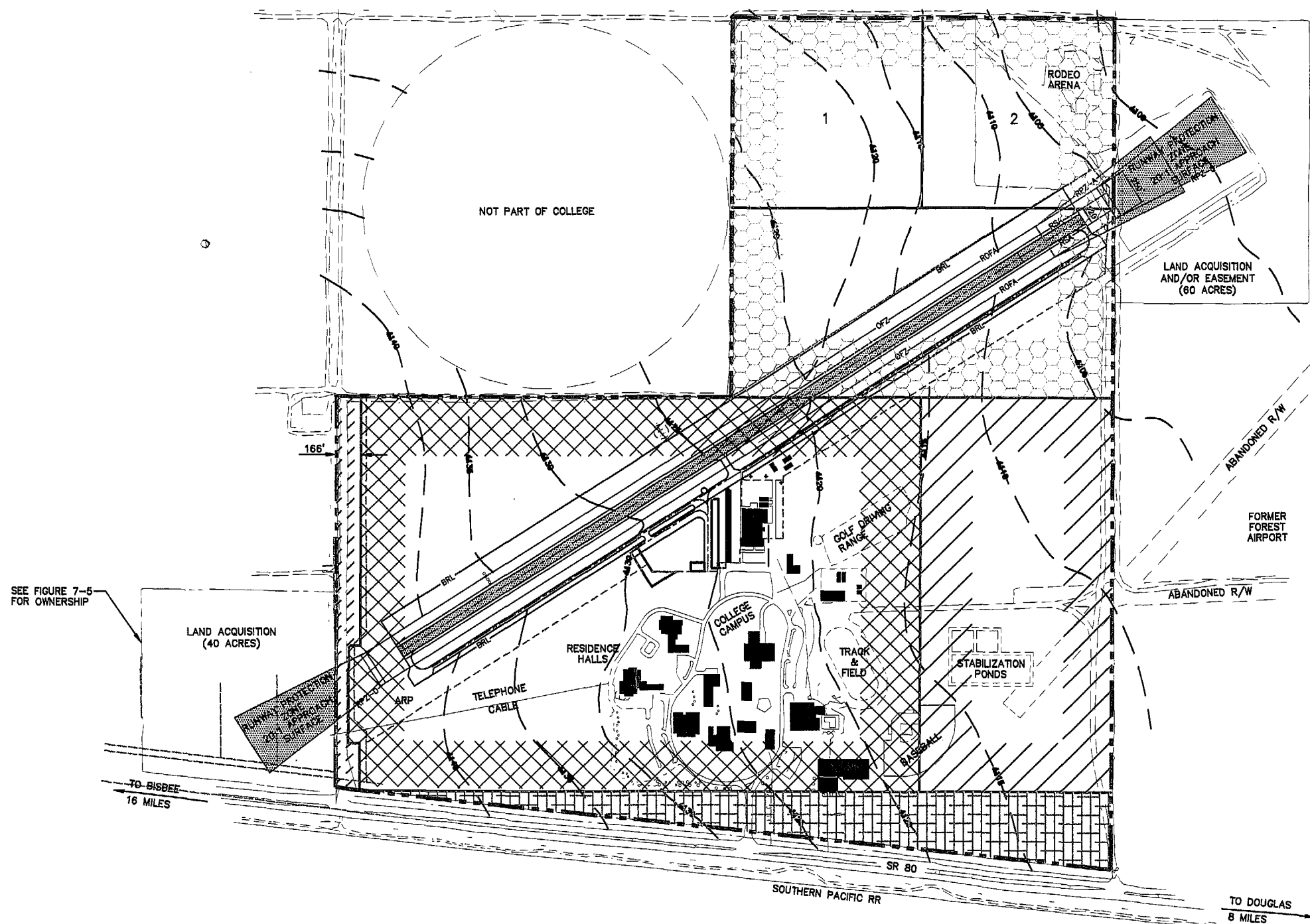


NOTES:

1. THE AIRPORT IS LOCATED IN THE UNINCORPORATED AREA OF COCHISE COUNTY, AZ
2. THE COLLEGE AND SURROUNDING AREAS ARE ZONED RU-4 RURAL ZONING DISTRICT. SEE PAGE 8-10 FOR PERMITTED USES IN ZONE RU-4
3. EXISTING AND PROPOSED USE OF LAND WITHIN COLLEGE BOUNDARY-EDUCATION (COMMUNITY COLLEGE LEVEL)

NOTE: NOISE CONTOURS WERE GENERATED USING INTEGRATED NOISE MODEL (INM) VERSION 6.0

NO.	DATE	REVISION	BY	APP.
LAND USE PLAN				
COCHISE COLLEGE AIRPORT DOUGLAS, ARIZONA				
DMJM ARIZONA INC. 2777 E. CAMELBACK ROAD SUITE 200 PHOENIX, ARIZONA 85016 (602)337-2777				
DESIGNED: JWG	CHECKED: SA	SHEET 5 OF 6		
DRAWN: MAR	DATE: 12/00			



SEE FIGURE 7-5
FOR OWNERSHIP

SEE FIGURE 7-5
FOR OWNERSHIP

LAND ACQUISITION
(40 ACRES)

LAND ACQUISITION
AND/OR EASEMENT
(60 ACRES)

FORMER
FOREST
AIRPORT

ABANDONED R/W

LEGEND

- LOT OR PARCEL BOUNDARY
- RUNWAY AREA (INTERIOR)
- AIRPORT PROPERTY LINE

LEGEND

- DKT 921128494, PATENT NO. 7504
LOTS ONE (1) & TWO (2), SOUTH HALF
NORTHEAST QUARTER (SE1/2, NE1/4) SECTION 3,
TOWNSHIP 24 SOUTH, RANGE 26 EAST
G&SRM COCHISE COUNTY, ARIZONA
PART OF COCHISE COUNTY TAX ASSESSOR
PARCEL NO. 407-61-11
- (UNKNOWN)
EAST HALF OF THE SOUTHEAST QUARTER
(E1/2, SE1/4) SECTION 3, TOWNSHIP 24
SOUTH, RANGE 26 EAST G&SRM COCHISE
COUNTY, ARIZONA COCHISE COUNTY TAX
ASSESSOR PARCEL NO. 407-61-10
- (UNKNOWN)
THE WEST HALF OF THE SOUTHEAST
QUARTER (W1/2, SE1/4) TOGETHER WITH
SOUTHWEST QUARTER (SW1/4) EXCEPT
FOR THE EAST 166' AS DESCRIBED IN
DKT 1101 PG 97, COCHISE COUNTY RECORDS,
SECTION 3, TOWNSHIP 24 SOUTH,
RANGE 26 EAST G&SRM COCHISE COUNTY,
ARIZONA. PART OF COCHISE COUNTY TAX
ASSESSOR PARCEL NO. 407-61-11

- UNKNOWN
PORTION OF THE NORTH HALF OF SECTION 10,
TOWNSHIP 24 SOUTH, RANGE 26 EAST,
LYING NORTH OF THE CENTERLINE OF US
HIGHWAY 80. BEGINNING AT THE NORTHWEST
CORNER OF SECTION 10 THENCE N 89°48'02" E
5330 FEET ALONG THE NORTH LINE OF SAID SECTION
10, THENCE S 00°24'50" W 714.99 FEET TO THE
SAID CENTERLINE OF US HIGHWAY 80,
THENCE N 83°05'30" W 5358.60 FEET, THENCE
N 00°03'52" W TO POINT OF BEGINNING.
CONTAINING 46.7 ACRES, MORE OR LESS.
COCHISE COUNTY TAX ASSESSOR PARCEL NO. 407-61-11
- DKT 1101 PG 97 COCHISE COUNTY RECORDS
WARRANTY DEED TO COCHISE COUNTY. THE
WEST 166 FEET OF THE SOUTHWEST QUARTER
(SW1/4) OF SECTION 3, TOWNSHIP 24 SOUTH,
RANGE 26 EAST G&SRM COCHISE COUNTY, ARIZONA
EXCEPT (DKT 936513076) THE EAST 80 FEET OF
THE WEST 166 FEET OF THE NORTH 675 FEET OF
THE SOUTH 1005 FEET OF THE SOUTHWEST QUARTER
(SW1/4) OF SECTION 3



MAGNETIC DECLINATION= 11 DEGREES 0.8 MINUTES EAST
ANNUAL RATE OF CHANGE= -2.0 MINUTES/YEAR

800 400 0 400 800
SCALE: 1"=400'

NOTE: NO FEDERAL AID FUNDING USED TO ACQUIRE PARCELS

NO.	DATE	REVISION	BY	APP.
AIRPORT PROPERTY MAP				
COCHISE COLLEGE AIRPORT DOUGLAS, ARIZONA				
DMJM		2777 E. CAMELBACK ROAD SUITE 200 PHOENIX, ARIZONA 85016 (602)337-2777		
DESIGNED: JWG		CHECKED: SA		SHEET 6 OF 6
DRAWN: MAR		DATE: 12/00		

FIGURE 7-6

Also shown on the drawing are the 2020 65db and 70 db noise contours. The Land Use Plan can be used as a Public Airport Disclosure Map

AIRPORT PROPERTY MAP

The Property Map, (refer to Figure 7--6) indicates (from the records of the Cochise County Tax Assessor) that the Douglas Campus is made up of three parcels generally described as follows:

- Book 407, Map 61, Parcel 10 – The East Half of the Southeast Quarter of Section 3, Township 24 Range 26.
- Book 407, Map 61, Parcel 11 - The Northeast Quarter of Section 3 together with the South Half of Section Three except the East half of the Southeast Quarter, Township 24 Range 26.
- Book 407, Map 61, Parcel 13 – A portion of the North Half of Section 10 lying north of the Right-of-Way for State Highway 80, Township 24, Range 26.

Total acreage of the Campus according to the Tax Assessor is 517.24 acres.

Appendix G contains copies of the relevant easements and deeds found in the records of the Cochise County Recorder's Office. Copies of the deeds for Parcel 11 and Parcel 13 could not be located in the Recorder's Office.

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